



# Astrophysics and Cosmology

The work described in this section involves collaborations throughout the Theory, Simulation, and Computation Directorate, across LANL, and worldwide. These articles represent only a small set of examples of the great breadth and broad interest in Astrophysics and Cosmology at LANL. Articles in this section cover subjects focused on the most exotic objects in the universe, including supernova progenitors, supernova remnants, the first planets in the universe, supermassive stars, and cosmological simulations of large-scale structure in the universe. These research efforts are excellent examples of the high-quality basic research conducted in the Directorate and indications of the overlap with programmatic activities of critical importance to fulfilling LANL's nuclear security mission.